Diversity Antenna Apparatus

Abstract of the Disclosure

[0078] In a diversity antenna apparatus, chip antennas are used as antenna elements, and the chip antennas are disposed in association with a ground pattern with certain gaps from the ground pattern. The chip antennas are disposed so as to surround the ground pattern formed on a substrate, and the ground pattern is shared among the chip antennas. Furthermore, hybrid patterns are included in the substrate, and the hybrid patterns also share the ground pattern with the chip antennas to achieve compact design. Alternatively, a transmitting chip antenna and a ground pattern associated with the transmitting chip antenna together form a vertically polarized antenna, and the transmitting chip antenna and the ground pattern associated with the transmitting chip antenna are separated from receiving chip antennas and a ground pattern associated with the receiving chip antennas.

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